UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/578,828	05/09/2006	Mark Gilmore Mears	PU030310	5255	
24498 Robert D. Shed	7590 01/07/200 d	EXAMINER			
Thomson Licen		CHOKSHI, PINKAL R			
PO Box 5312 PRINCETON, I	NJ 08543-5312	ART UNIT	PAPER NUMBER		
·			2425		
			MAIL DATE	DELIVERY MODE	
			01/07/2009	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Communication		Application	n No.	Applicant(s)				
		10/578,82	8	MEARS ET AL.				
	Office Action Summary	Examiner		Art Unit				
		PINKAL C	HOKSHI	2425				
Period fo	The MAILING DATE of this communication appropriate of the plant of the mail of the main appropriate of the mail	ppears on the	cover sheet with the c	orrespondence ad	ddress			
WHIC - Exte after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REP CHEVER IS LONGER, FROM THE MAILING Insions of time may be available under the provisions of 37 CFR 1 SIX (6) MONTHS from the mailing date of this communication. In period for reply is specified above, the maximum statutory perior to reply within the set or extended period for reply will, by statuted period by the Office later than three months after the mailed patent term adjustment. See 37 CFR 1.704(b).	DATE OF TH 1.136(a). In no even and will apply and will ute, cause the appl	IS COMMUNICATION ont, however, may a reply be time of the service	N. nely filed the mailing date of this of (35 U.S.C. § 133).				
Status								
1) \	Responsive to communication(s) filed on 14	November 2	ากร					
-	Responsive to communication(s) filed on <u>14 November 2008</u> . This action is FINAL . 2b) This action is non-final.							
3)	, 							
٥/ا	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Disposit	on of Claims							
4)🖂	4)⊠ Claim(s) <u>1-18</u> is/are pending in the application.							
	4a) Of the above claim(s) is/are withdrawn from consideration.							
	i) Claim(s) is/are allowed.							
·	6)⊠ Claim(s)is/are allowed. 6)⊠ Claim(s) <u>1-18</u> is/are rejected.							
	Claim(s) is/are objected to.							
-	Claim(s) are subject to restriction and	or election re	equirement.					
Applicat	ion Papers							
9)□	The specification is objected to by the Examir	ner.						
•	9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.							
٠٠/۵		-	-					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).								
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.								
Priority ι	ınder 35 U.S.C. § 119							
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 								
2) Notice (3) Inform	e of References Cited (PTO-892) se of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO/SB/08) r No(s)/Mail Date		4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	ate				

Art Unit: 2425

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 11/14/2008 have been fully considered but they are not persuasive are moot in view of the new ground(s) of rejection. Applicant asserts that Johnson does not disclose generating an on-screen menu. Examiner respectfully disagrees. Johnson discloses (pg.5, lines 7-12) that the microcontroller in the receiver generates and displays OSD information. Johnson further discloses (pg.3, lines 6-12) that a GUI of channel search menu allows the user to accomplish channel search on the selected signal input. Johnson further discloses (pg.3, lines 10-12) that the multiple GUI functions of channel search menu can be combined together in a single GUI screen.

Furthermore, Applicant alleges that Shintani does not disclose providing options for both individual control over which inputs are scanned and which channel types are scanned. Examiner respectfully disagrees. Shintani discloses (¶0059 and ¶0070-¶0071) that the channel scan is provided for one or more signal inputs and one or more signals, based on the manual input received by a user that instructs system which signal input should be scanned and which input should not be scanned. Shintani further discloses (¶0037-¶0038) that the manual input, received from user, instructs controller which provides instructions to the selector to determine the signal and modulation scheme.

With regard to the dependent claims, the respective rejections are maintained as Applicant has only argued that the secondary reference does not cure the deficiencies

Art Unit: 2425

of Johnson, nevertheless it is the Examiner's contention that Johnson does not contain any deficiencies. See the new rejection below.

Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO Publication 01/06771 A1 to Johnson et al (hereafter referenced as Johnson) in view of US PG Pub 2005/0086693 A1 to Shintani et al (hereafter referenced as Shintani).

Regarding **claim 1**, "a method for enabling a channel search in a signal processing apparatus" reads on the method that scans received signal for channel mapping (abstract and title) disclosed by Johnson and represented in Fig. 1.

As to "method comprising the steps of: generating a signal suitable for coupling to a display device for displaying an on-screen menu" Johnson discloses (pg.5, lines 7-12) that the method displays OSD information, which is a part of television signal, on a display device as represented in Fig. 1 (element 22).

Art Unit: 2425

As to "enabling a user to present said channel search responsive to said on-screen menu" Johnson discloses (pg.3, lines 6-9) that the channel search menu allow the user to accomplish channel search on the selected signal input.

As to "wherein said plurality of options includes a first option to search at least one of a plurality of inputs to said signal processing apparatus" Johsnon discloses (pg.6, lines 19-21 and pg.8, lines 6-7) that the channel search detects all available channels based on the selected signal inputs. As to "a second option to search at least one of a plurality of types of channels" Johnson discloses (pg.7, lines 9-22) that the channel search is started based on the user's selection of channels characteristic (analog/digital) of the signal input.

Johnson does not teach the limitation "select a plurality of options." However, Johnson discloses (pg.5, lines 9-12) the generation of on-screen menus and it would therefore be self obvious to the skilled person to consider allowing the selection of the said options from an on-screen menu, specially in the light of the description on pg.3, lines 10-12, mentioning the advantage of a single menu screen when compared to navigation through several menu screens.

Johnson meets all the limitations of the claim except above limitation "select a plurality of options." However, Shintani discloses (¶0038) that based on the user input, controller selects video input and type of video signals for channel search as represented in Fig. 3 (steps 312, 314, 316, 320). As to "plurality of options includes option to individually select which of a plurality of inputs and

Art Unit: 2425

types of channels are to be searched" Shintani discloses (¶0059 and ¶0070-¶0071) that the channel scan is provided for one or more signal inputs and one or more signals, based on the manual input received by a user that instructs system which signal input should be scanned and which input should not be scanned. Shintani further discloses (¶0037-¶0038) that the manual input, received from user, instructs controller which provides instructions to the selector to determine the signal and modulation scheme. Therefore, it would have been obvious to one of the ordinary skills in the art at the time of the invention to modify Johnson's system by providing individually selecting search options for channel search selection as taught by Shintani so user does not need to spend time scanning an input/signal that user doesn't desired and also to search all available channels on all available signals from all available input and by

Page 5

Regarding **claim 2**, "the method wherein said plurality of inputs includes a cable input and an antenna input" Johnson discloses (pg.4, lines 29-31) that the analog/digital signals are received from antenna and cable TV as represented in Fig. 1 (element 34, 36, 38).

providing individual search option (¶0005 and ¶0059).

Regarding **claim 3**, "the method wherein said plurality of types of channels includes digital modulation channels and analog modulation channels" Johnson

Art Unit: 2425

discloses (pg.3, lines 19-21) that the multimedia system receives analog/digital signals to perform channel search as represented in Fig. 1 (element 34, 36, 38).

Page 6

Regarding **claim 4**, "the method wherein said plurality of options further includes a third option to detect a type of signal received via least one of said plurality of inputs" Johnson discloses (pg.7, lines 5-7 and pg.8, lines 14-16) that the detection of the type of signal may or may not be performed automatically. However, the examiner takes official notice that it was well known in the art at the time of the invention to manually select to detect a type of signal received in device. Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to add manual selection to Johnson's automatic system would have yielded predictable result of reducing the time to perform the channel search function.

Regarding **claim 5**, "the method wherein said plurality of options further includes a fourth option to search previously found channels" Shintani discloses (¶0028 and ¶0033) that the user manually input to rerun previously generated channel map to regenerate an updated channel map. Therefore, it would have been obvious to one of the ordinary skills in the art at the time of the invention to search previously found channels as taught by Shintani so the newly detected channel is simply assigned and incorporated into the updated channel map (¶0076).

Art Unit: 2425

Regarding **claim 6**, "the method further comprised of performing said channel search according to said plurality of options selected by said user"

Johnson discloses (pg.2, line 22-pg.3, line 12) to perform channel searching based on user's selection to signal input and other variables.

Page 7

Regarding **claim 7**, "an apparatus for enabling a channel search" reads on the apparatus that scans received signal for channel mapping (abstract and title) disclosed by Johnson and represented in Fig. 1.

As to "apparatus comprising: memory means for storing data used to generate a signal suitable for coupling to a display device for displaying an onscreen menu" Johnson discloses (pg.5, lines 7-12, 15-16; pg. 6, lines 1-3) that the apparatus stores data on the memory that displays OSD information, which is a part of television signal, on a display device as represented in Fig. 1 (element 42).

As to "processing means for enabling a user to present said channel search responsive to said on-screen menu" Johnson discloses (pg.3, lines 6-9) that the channel search menu allow the user to accomplish channel search on the selected signal input.

As to "wherein said plurality of options includes a first option to search at least one of a plurality of inputs to said apparatus" Johsnon discloses (pg.6, lines 19-21 and pg.8, lines 6-7) that the channel search detects all available channels

Art Unit: 2425

based on the selected signal inputs. As to "a second option to search at least one of a plurality of types of channels" Johnson discloses (pg.7, lines 9-22) that the channel search is started based on the user's selection of channels characteristic (analog/digital) of the signal input.

Page 8

Johnson does not teach the limitation "select a plurality of options." However, Johnson discloses (pg.5, lines 9-12) the generation of on-screen menus and it would therefore be self obvious to the skilled person to consider allowing the selection of the said options from an on-screen menu, specially in the light of the description on pg.3, lines 10-12, mentioning the advantage of a single menu screen when compared to navigation through several menu screens.

Johnson meets all the limitations of the claim except above limitation "select a plurality of options." However, Shintani discloses (¶0038) that based on the user input, controller selects video input and type of video signals for channel search as represented in Fig. 3 (steps 312, 314, 316, 320). As to "plurality of options includes option to individually select which of a plurality of inputs and types of channels are to be searched" Shintani discloses (¶0059 and ¶0070-¶0071) that the channel scan is provided for one or more signal inputs and one or more signals, based on the manual input received by a user that instructs system which signal input should be scanned and which input should not be scanned. Shintani further discloses (¶0037-¶0038) that the manual input, received from user, instructs controller which provides instructions to the selector

to determine the signal and modulation scheme. Therefore, it would have been obvious to one of the ordinary skills in the art at the time of the invention to modify Johnson's system by providing individually selecting search options for channel search selection as taught by Shintani so user does not need to spend time scanning an input/signal that user doesn't desired and also to search all available channels on all available signals from all available input and by providing individual search option (¶0005 and ¶0059).

Regarding **claim 8**, "the apparatus wherein said plurality of inputs includes a cable input and an antenna input" Johnson discloses (pg.4, lines 29-31) that the analog/digital signals are received from antenna and cable TV as represented in Fig. 1 (element 34, 36, 38).

Regarding **claim 9**, "the apparatus wherein said plurality of types of channels includes digital modulation channels and analog modulation channels" Johnson discloses (pg.3, lines 19-21) that the multimedia system receives analog/digital signals to perform channel search as represented in Fig. 1 (element 34, 36, 38).

Regarding **claim 10**, "the apparatus wherein said plurality of options further includes a third option to detect a type of signal received via least one of said plurality of inputs" Johnson discloses (pq.7, lines 5-7 and pq.8, lines 14-16)

Art Unit: 2425

that the detection of the type of signal may or may not be performed automatically. However, the examiner takes official notice that it was well known in the art at the time of the invention to manually select to detect a type of signal received in device. Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to add manual selection to Johnson's automatic system would have yielded predictable result of reducing the time to perform the channel search function.

Regarding **claim 11**, "the apparatus wherein said plurality of options further includes a fourth option to search previously found channels" Shintani discloses (¶0028 and ¶0033) that the user manually input to rerun previously generated channel map to regenerate an updated channel map. Therefore, it would have been obvious to one of the ordinary skills in the art at the time of the invention to search previously found channels as taught by Shintani so the newly detected channel is simply assigned and incorporated into the updated channel map (¶0076).

Regarding **claim 12**, "the apparatus wherein said processing means enables performance of said channel search according to said plurality of options selected by said user" Johnson discloses (pg.2, line 22-pg.3, line 12) to perform channel searching based on user's selection to signal input and other variables.

Art Unit: 2425

Regarding **claim 13**, "a video signal processor" reads on the apparatus that scans received signal for channel mapping (abstract and title) disclosed by Johnson and represented in Fig. 1.

As to "processor comprising: a memory operative to store data used to generate a signal suitable for coupling to a display device for displaying an onscreen menu" Johnson discloses (pg.5, lines 7-12, 15-16; pg. 6, lines 1-3) that the apparatus stores data on the memory that displays OSD information, which is a part of television signal, on a display device as represented in Fig. 1 (element 42).

As to "a controller operative to enable a user to present a channel search responsive to said on-screen menu" Johnson discloses (pg.3, lines 6-9) that the channel search menu control by microcontroller allow the user to accomplish channel search on the selected signal input as represented in Fig. 1 (element 32).

As to "wherein said plurality of options includes a first option to search at least one of a plurality of inputs to said video signal processor" Johsnon discloses (pg.6, lines 19-21 and pg.8, lines 6-7) that the channel search detects all available channels based on the selected signal inputs. As to "a second option to search at least one of a plurality of types of channels" Johnson discloses (pg.7, lines 9-22) that the channel search is started based on the user's selection of channels characteristic (analog/digital) of the signal input.

Art Unit: 2425

Johnson does not teach the limitation "select a plurality of options." However, Johnson discloses (pg.5, lines 9-12) the generation of on-screen menus and it would therefore be self obvious to the skilled person to consider allowing the selection of the said options from an on-screen menu, specially in the light of the description on pg.3, lines 10-12, mentioning the advantage of a single menu screen when compared to navigation through several menu screens.

Johnson meets all the limitations of the claim except above limitation "select a plurality of options." However, Shintani discloses (¶0038) that based on the user input, controller selects video input and type of video signals for channel search as represented in Fig. 3 (steps 312, 314, 316, 320). As to "plurality of options includes option to individually select which of a plurality of inputs and types of channels are to be searched" Shintani discloses (¶0059 and ¶0070-¶0071) that the channel scan is provided for one or more signal inputs and one or more signals, based on the manual input received by a user that instructs system which signal input should be scanned and which input should not be scanned. Shintani further discloses (¶0037-¶0038) that the manual input, received from user, instructs controller which provides instructions to the selector to determine the signal and modulation scheme. Therefore, it would have been obvious to one of the ordinary skills in the art at the time of the invention to modify Johnson's system by providing individually selecting search options for channel search selection as taught by Shintani so user does not need to spend

Art Unit: 2425

time scanning an input/signal that user doesn't desired and also to search all available channels on all available signals from all available input and by providing individual search option (¶0005 and ¶0059).

Regarding **claim 14**, "the video signal processor wherein said plurality of inputs includes a cable input and an antenna input" Johnson discloses (pg.4, lines 29-31) that the analog/digital signals are received from antenna and cable TV as represented in Fig. 1 (element 34, 36, 38).

Regarding **claim 15**, "the video signal processor wherein said plurality of types of channels includes digital modulation channels and analog modulation channels" Johnson discloses (pg.3, lines 19-21) that the multimedia system receives analog/digital signals to perform channel search as represented in Fig. 1 (element 34, 36, 38).

Regarding **claim 16**, "the video signal processor wherein said plurality of options further includes a third option to detect a type of signal received via least one of said plurality of inputs" Johnson discloses (pg.7, lines 5-7 and pg.8, lines 14-16) that the detection of the type of signal may or may not be performed automatically. However, the examiner takes official notice that it was well known in the art at the time of the invention to manually select to detect a type of signal received in device. Therefore, it would have been obvious to one of ordinary

Art Unit: 2425

skills in the art at the time of the invention to add manual selection to Johnson's automatic system would have yielded predictable result of reducing the time to perform the channel search function.

Regarding **claim 17**, "the video signal processor wherein said plurality of options further includes a fourth option to search previously found channels" Shintani discloses (¶0028 and ¶0033) that the user manually input to rerun previously generated channel map to regenerate an updated channel map. Therefore, it would have been obvious to one of the ordinary skills in the art at the time of the invention to search previously found channels as taught by Shintani so the newly detected channel is simply assigned and incorporated into the updated channel map (¶0076).

Regarding **claim 18**, "the video signal processor wherein said controller is further operative to enable performance of said channel search according to said plurality of options selected by said user" Johnson discloses (pg.2, line 22-pg.3, line 12) to perform channel searching based on user's selection to signal input and other variables.

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

Art Unit: 2425

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PINKAL CHOKSHI whose telephone number is (571) 270-3317. The examiner can normally be reached on Monday-Friday 8 - 5 pm (Alt. Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Pendleton can be reached on 571-272-7527. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2425

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Pinkal Chokshi/ Examiner, Art Unit 2425 /Hunter B. Lonsberry/ Primary Examiner, Art Unit 2421